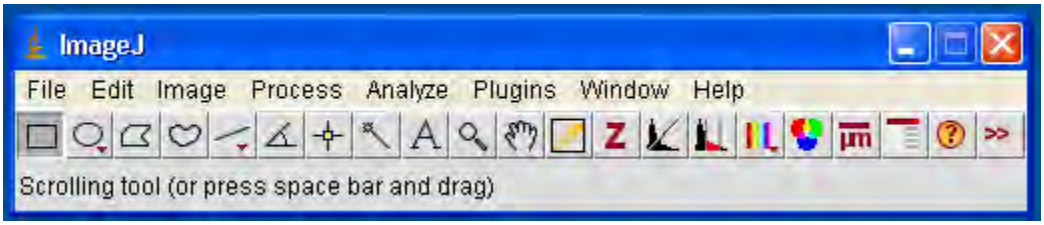
Tutorial - Imagej

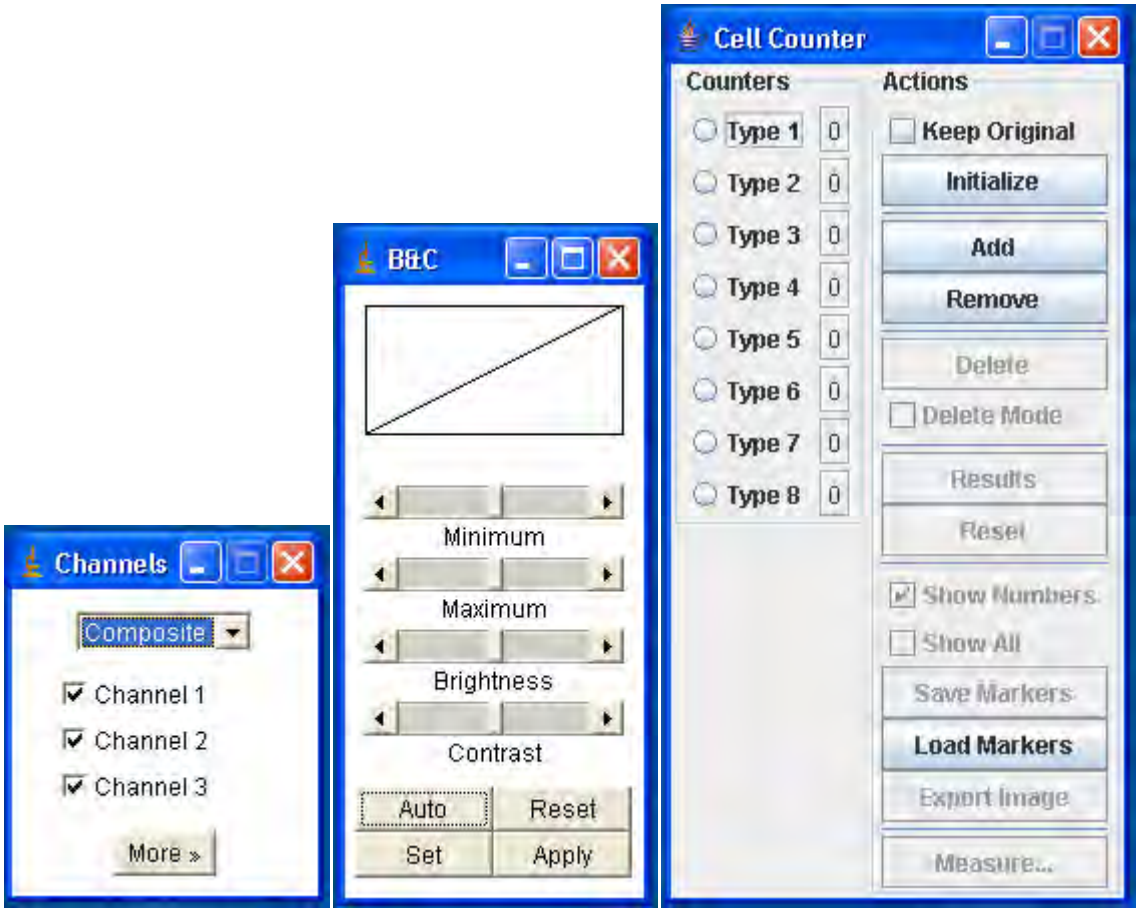
Differential staining of trophectoderm and inner cell mass of bovine embryos

http://rsbweb.nih.gov/ij/ or use PJH copy at V:\hansenlab\Imagej



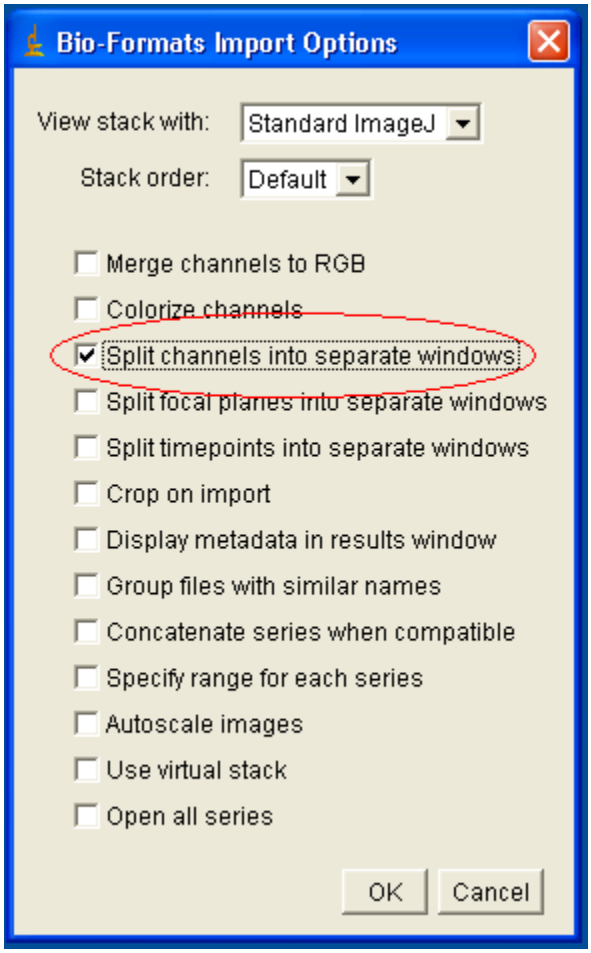
Open the specific tools:

- Image>Color>Channel Tool
- Image>Adjust>Brightness/Contrast – Shortcut: Ctrl+shift+C
- Plugins>Analyze>Cell counter



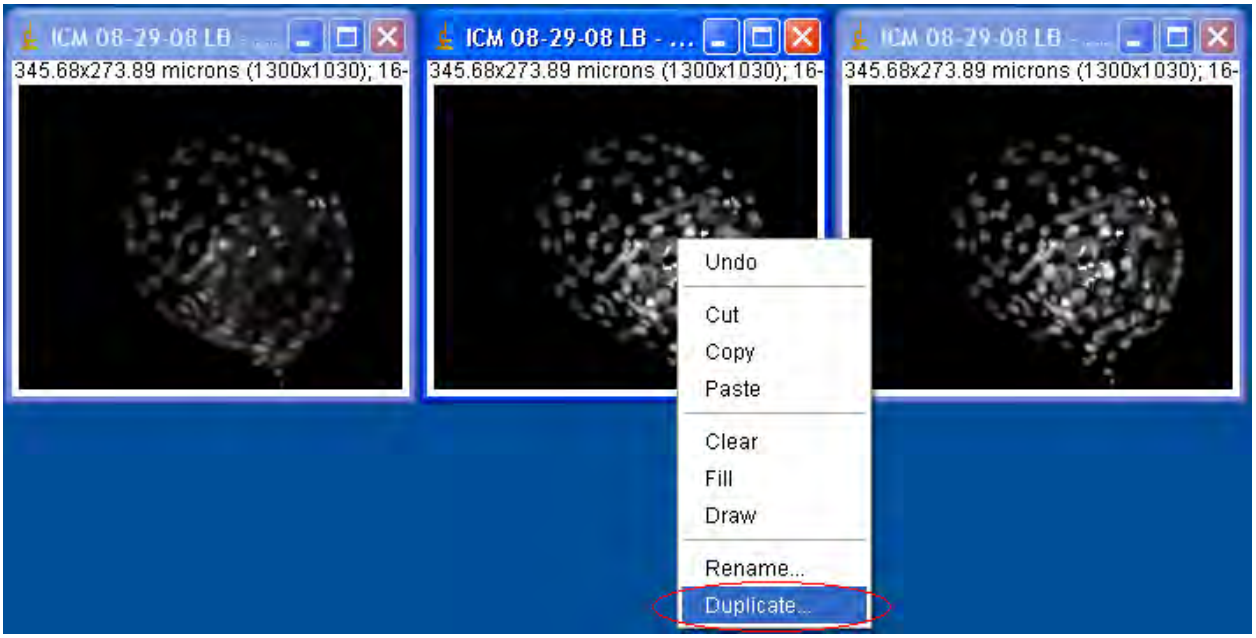
Working with Imagej

Open the picture and select the options:



In my case I have 3 channels: DIC, Rhodamine and DAPI

Close DIC channel and duplicate the DAPI (right).

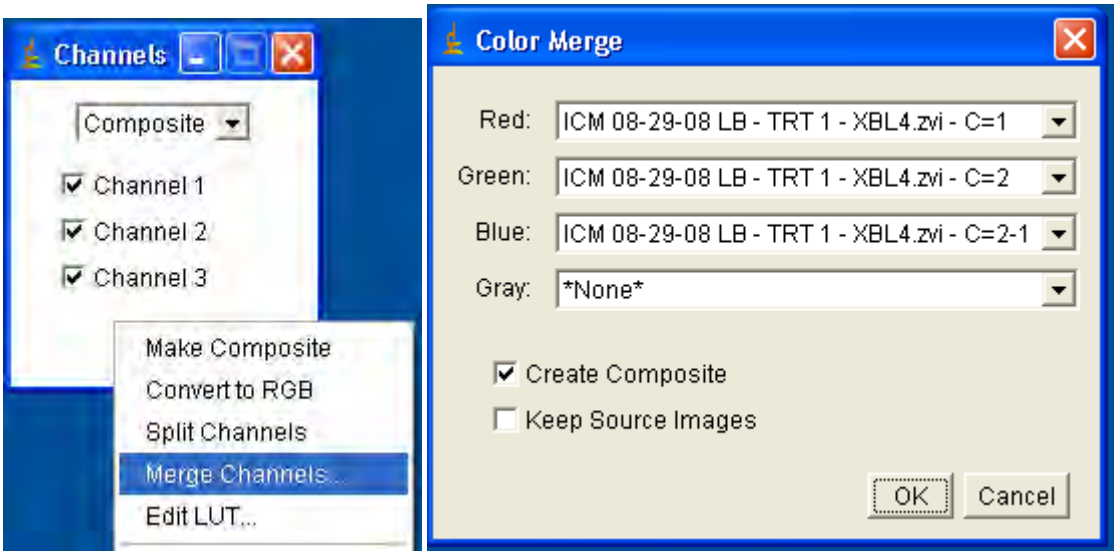


Select the duplicated channel to apply the Find Edges function.

- Process>Find Edges

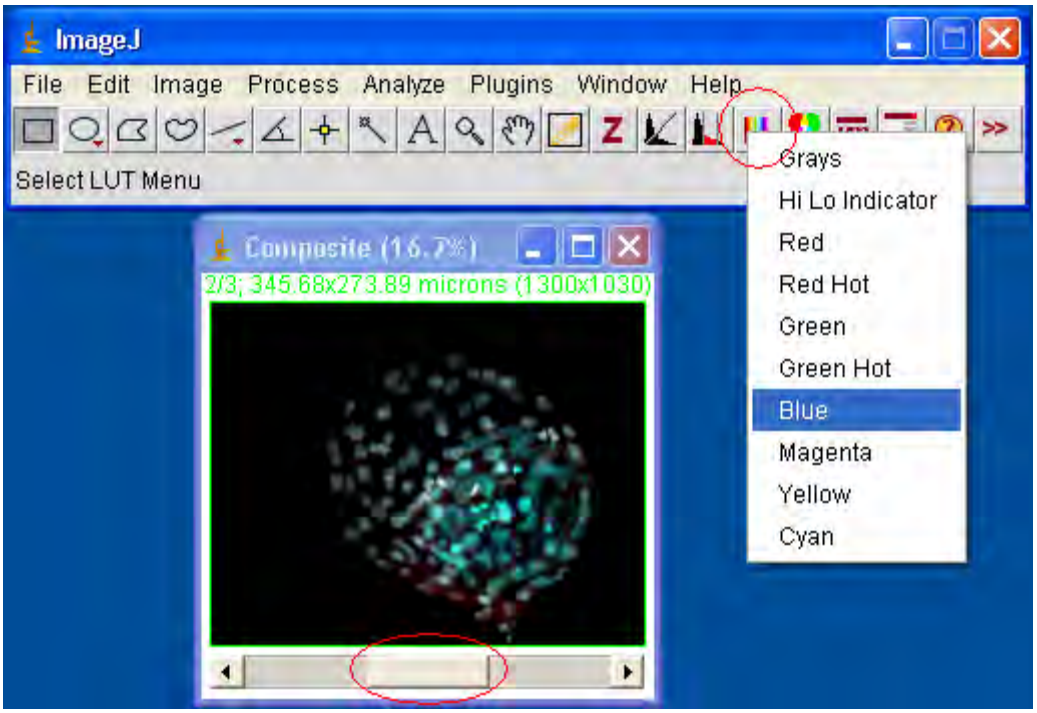
At the Channel tools we are going to merge all the channels.

- More>Merge Channels…



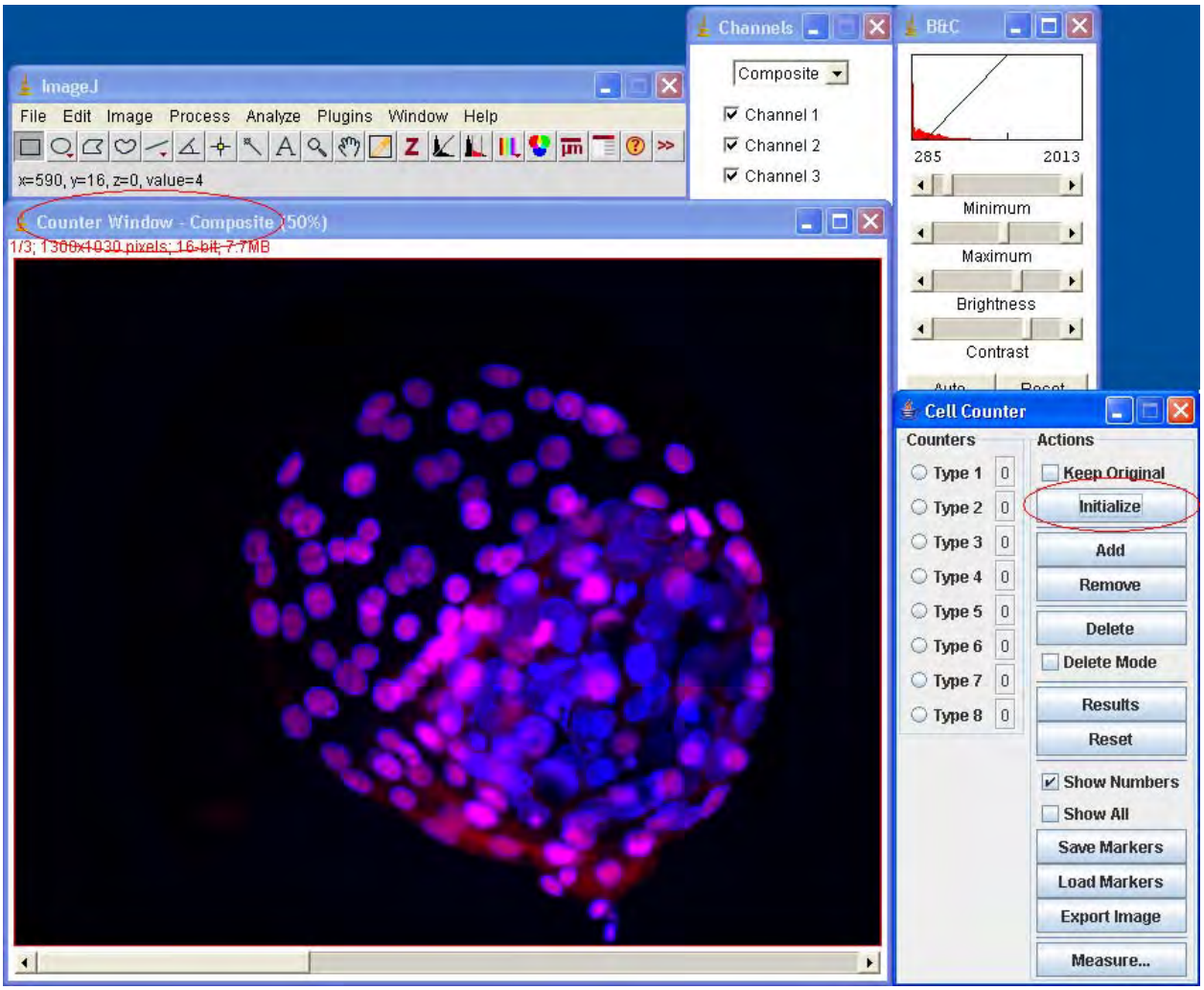
Change channel 2 to the blue as shown below.

- Change to channel 2: move the scroll bar to the middle.
- Change to blue color.



Counting cells

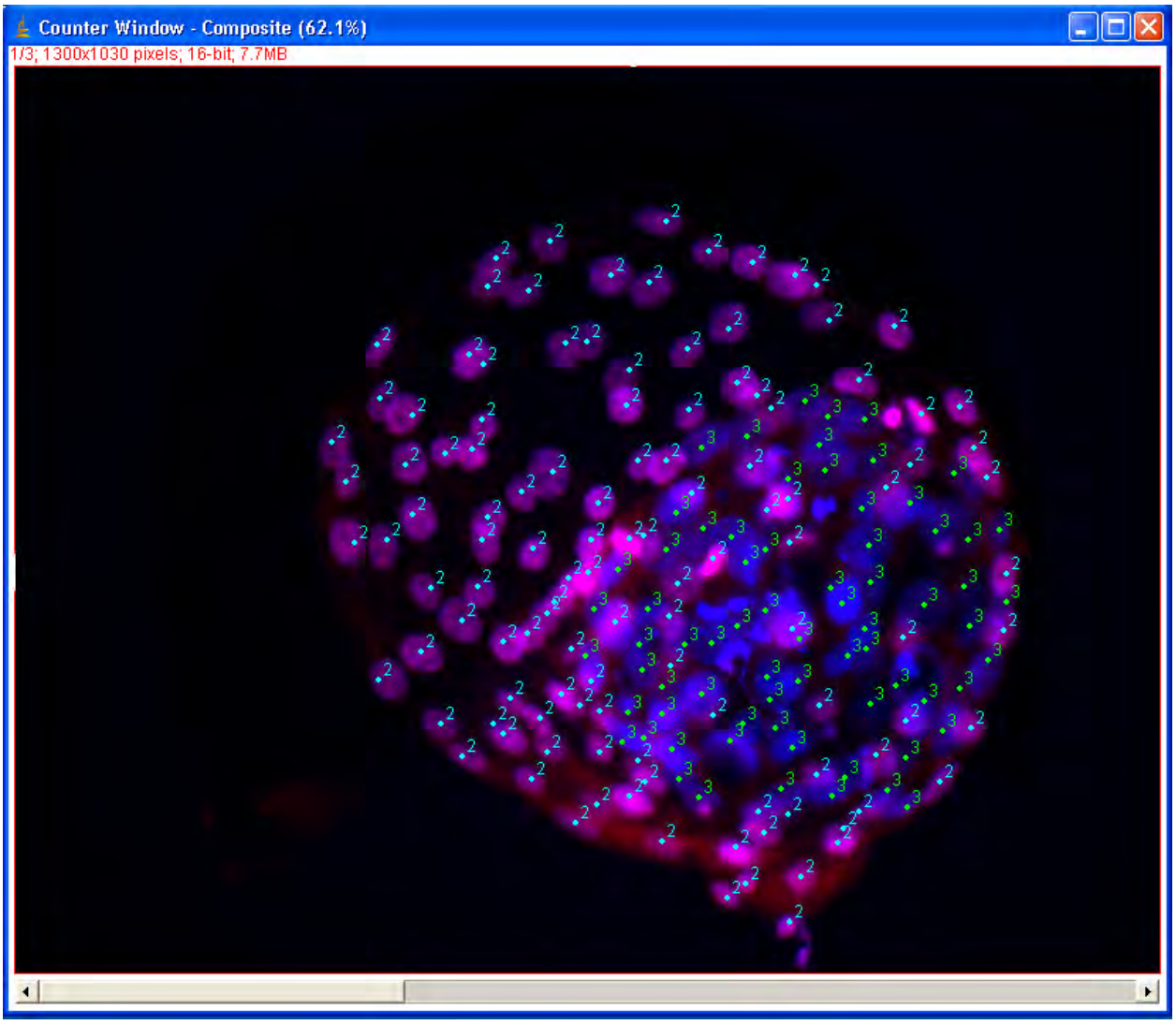
Press the Initialize button in the cell Counter window, and select the Type of counters (e.g. Type 1, Type 2).



Useful hints for the first time user

Each ***Type counting*** has different colors, chose yours. Avoid the Type 1 because it is a dark blue color and difficult to see on that kind of picture.

Use the ***Channel window*** to turn on and off the channels during counting, that will make your count easier. Channel 3 with the Edges is good just for overlapping cells.



Cheers!!!

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